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tgaattcggtt tgtgttttgt ttttggtact ttatgcccc aactccttt aacatttgtc 1261
ataatgtggt tgaacct

IN THE CLAIMS:

Please delete claims 38, 39, 42, 43, and 44.

Please amend claims 1, 5, 15, 24, 26, 35, 36, 40, and 41 as follows:

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1. (amended) A method of modulating seed mass in a plant, the method comprising:

providing a first plant comprising a recombinant expression cassette containing an *ADC* nucleic acid linked to a plant promoter, which *ADC* nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content;

selfing the first plant or crossing the first plant with a second plant, thereby producing a plurality of seeds; and

selecting seed with altered mass.

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5. (amended) The method of claim 2, wherein the *ADC* nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

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15. (amended) The method of claim 14, wherein the *ADC* nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank

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accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

24. (amended) A seed comprising a recombinant expression cassette containing an ADC nucleic acid, which ADC nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which ADC nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the seed is not from *Arabidopsis*.

26. (amended) The seed of claim 24, wherein the ADC nucleic acid is selected from a group consisting of SEQ ID NO:3, SEQ ID NO: 100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO 110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

35. (amended) A transgenic plant comprising an expression cassette containing a plant promoter operably linked to a heterologous ADC polynucleotide, wherein the ADC polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which ADC nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the transgenic plant is not *Arabidopsis*.

36. (amended) The transgenic plant of claim 35, wherein the ADC polynucleotide is selected from a group consisting of SEQ ID NO: 3, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO 110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

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40. (amended) An isolated nucleic acid molecule comprising an expression cassette containing a plant promoter operably linked to a heterologous *ADC* polynucleotide, wherein the *ADC* polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 95% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content, with the proviso that the isolated nucleic acid is not SEQ ID NO: 3.

41. (amended) The isolated nucleic acid molecule of claim 40, wherein the *ADC* polynucleotide is selected from a group consisting of SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 [Genbank accession numbers U12546, AF003094, AF003095, AF003096, AF003097, AF003098, AF003099, AF003100, AF003101, AF003102, AF003103, AF003104, and AF003105].

Please add claims 45-114 as follows:

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--45. A method of modulating seed oil content in a plant, the method comprising:

providing a first plant comprising a recombinant expression cassette containing an *ADC* nucleic acid linked to a plant promoter, which *ADC* nucleic acid encodes a polypeptide comprising an AP2 domain which is at least 35% identical to SEQ ID NO:4 or SEQ ID NO:5 and which *ADC* nucleic acid encodes a polypeptide that modulates seed mass or oil content;

selfing the first plant or crossing the first plant with a second plant, thereby producing a plurality of seeds; and

selecting seed with altered oil content.

46. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:96.

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47. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:97.
48. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:98.
49. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID NO:99.
50. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:100.
51. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:101.
52. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:102.
53. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:103.
54. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:104.
55. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:105.
56. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:106.
57. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:107.

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58. The method of claim 5, wherein the *ADC* nucleic acid is SEQ ID
NO:108.
59. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:96.
60. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:97.
61. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:98.
62. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:99.
63. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:100.
64. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:101.
65. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:102.
66. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:103.
67. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
NO:104.

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- NO:105. 68. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
- NO:106. 69. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
- NO:107. 70. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
- NO:108. 71. The method of claim 14, wherein the *ADC* nucleic acid is SEQ ID
72. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:96.
73. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:97.
74. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:98.
75. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:99.
76. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:100.
77. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:101.
78. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:102.
79. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:103.
80. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:104.

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81. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:105.
82. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:106.
83. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:107.
84. The seed of claim 26, wherein the *ADC* nucleic acid is SEQ ID NO:108.
85. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:96.
86. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:97.
87. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:98.
88. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:99.
89. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:100.
90. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:101.
91. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:102.

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92. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:103.
93. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:104.
94. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:105.
95. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:106.
96. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:107.
97. The transgenic plant of claim 36, wherein the *ADC* nucleic acid is SEQ ID NO:108.
98. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:96.
99. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:97.
100. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:98.
101. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:99.

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102. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:100.

103. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:101.

104. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:102.

105. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:103.

106. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:104.

107. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:105.

108. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:106.

109. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:107.

110. The isolated nucleic acid of claim 41, wherein the *ADC* nucleic acid is SEQ ID NO:108.

111. The method of claim 1, wherein the *ADC* polynucleotide encodes a polypeptide comprising an AP2 domain which is at least 60% identical to SEQ ID NO: 4 or SEQ ID NO: 5.